

REMARKS

Reconsideration of this application, in view of the foregoing amendment and the following remarks, is respectfully requested.

Claims 1-45 were originally presented for consideration in this application. No claims have been canceled or added. Accordingly, claims 1-45 remain pending in this application.

The examiner's careful search of the prior art and examination of the application is appreciated. In the Office Action, a spelling error in claim 15 was identified, and this error has been corrected above. In addition, the applicant has taken this opportunity to correct several other errors in grammar in the claims, and has otherwise amended many of the claims to use more consistent terminology.

All of the claims in the application were rejected in the Office Action as being obvious over the teachings of U.S. Patent No. 6,886,631 to Wilson et al. This reference describes a tool assembly 110 for inflating an inflatable element 112 such as a packer or plug in a well. Multiple sensors 118 or 330 can be used to monitor well parameters such as temperature, pressure, density and capacitance at the tool assembly 110. The sensors are included in a probe 116 or 316 attached to an inflation tool 114 for inflating the inflatable element 112. The probe includes a sensor interface circuit which is connected to the sensors, and which communicates the sensor data to the surface. Time division multiplexing is described as being one method by which data from the various sensors may be communicated to the surface using the sensor interface circuit.

A very different problem was confronted by the inventors in the present application. Instead of a single sensor interface circuit for a single probe with multiple sensors, the present inventors were challenged to come up with a way of transmitting

data from multiple transmitters spaced apart in a well and attempting to transmit via the same communications medium. Of course, if a single transmitter is transmitting data from multiple sensors, it is relatively straightforward to use time division multiplexing to transmit data from the sensors in respective time slots with the single transmitter.

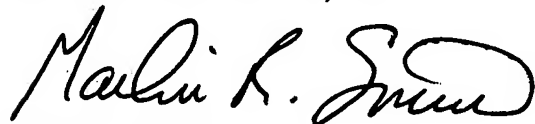
However, the use of multiple transmitters spaced apart in the well and trying to communicate via the same communications medium is an entirely different matter. For example, one problem faced by the inventors was how to get the various transmitters to transmit the appropriate data at the appropriate time via the same communications medium. The independent claims 1, 13, 29 and 36 have been amended above to highlight the distinctions between the present invention and the Wilson patent. It is respectfully argued that the claims define an invention which is clearly not rendered obvious by the teachings of the Wilson patent.

In view of the foregoing amendment and remarks, all of the claims pending in this application are now seen to be in a condition for allowance. A Notice of Allowance of claims 1-45 is therefore earnestly solicited.

The examiner is hereby requested to telephone the undersigned attorney of record at (972) 516-0030 if such would expedite the prosecution of the application.

Respectfully submitted,

KONNEKER & SMITH, P.C.

A handwritten signature in black ink, appearing to read "Marlin R. Smith". The signature is fluid and cursive, with the first name "Marlin" being more prominent than the last name "Smith".

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